SAFETY DATA SHEET

TEKNOLUX AQUA 1728-53 - RAL 9010

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : TEKNOLUX AQUA 1728-53 - RAL 9010

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : In an emergency, call 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Sens. 1, H317
Carc. 1B, H350
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H317 - May cause an allergic skin reaction.
H350 - May cause cancer.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P273 - Avoid release to the environment.
P261 - Avoid breathing vapour.

Response : P308 + P313 - IF exposed or concerned: Get medical advice or attention.

Storage : Not applicable.

SECTION 2: Hazards identification

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Contains: ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate; Benzophenon; 2,2-bis (acryloyloxymethyl)butyl acrylate and 2-methyl-2H-isothiazol-3-one

Supplemental label elements : Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥10 - ≤25	Carc. 2, H351 (inhalation)	-	[1] [*]
ethyl phenyl (2,4,6-trimethylbenzoyl) phosphinate	REACH #: 01-2119987994-10 EC: 282-810-6 CAS: 84434-11-7	≤3	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
Benzophenon	REACH #: 01-2119899704-20 EC: 204-337-6 CAS: 119-61-9 Index: 606-153-00-5	≤3	Carc. 1B, H350 STOT RE 2, H373 Aquatic Chronic 3, H412	-	[1]
2,2-bis(acryloyloxymethyl) butyl acrylate	REACH #: 01-2119489896-11 EC: 239-701-3 CAS: 15625-89-5 Index: 607-111-00-9	≤1.9	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Triethylamine	REACH #: 01-2119475467-26 EC: 204-469-4 CAS: 121-44-8 Index: 612-004-00-5	<1	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	ATE [Oral] = 460 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 3, H335: C ≥ 1%	[1] [2]
2-Butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0	<1	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315	ATE [Oral] = 1200 mg/kg ATE [Inhalation	[1] [2]

SECTION 3: Composition/information on ingredients

	CAS: 111-76-2 Index: 603-014-00-0		Eye Irrit. 2, H319	(vapours)] = 3 mg/l	
propylidynetrimethanol	REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6	≤0.3	Repr. 2, H361fd	-	[1]
Acrylic acid	REACH #: 01-2119452449-31 EC: 201-177-9 CAS: 79-10-7	≤0.3	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l STOT SE 3, H335: C ≥ 1% M [Acute] = 1	[1] [2]
2-methyl-2H-isothiazol-3-one	EC: 220-239-6 CAS: 2682-20-4	<0.01	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (dusts and mists)] = 0.11 mg/l Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 10 M [Chronic] = 1	[1]
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS: 55965-84-9 Index: 613-167-00-5	≤0.0027	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071 **See Section 16 for the full text of the H statements declared above.**	ATE [Oral] = 53 mg/kg ATE [Dermal] = 50 mg/kg ATE [Inhalation (vapours)] = 0.5 mg/l Skin Corr. 1C, H314: C ≥ 0.6% Eye Dam. 1, H318: C ≥ 0.6% Eye Irrit. 2, H319: 0.06% ≤ C < 0.6% Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

SECTION 5: Firefighting measures

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

SECTION 7: Handling and storage

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Triethylamine	**Regulation on Limit Values - MAC (Austria, 4/2021).** TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours. PEAK: 3 ppm, 4 times per shift, 15 minutes. PEAK: 12.6 mg/m³, 4 times per shift, 15 minutes.
2-Butoxyethanol	**Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. PEAK: 40 ppm, 4 times per shift, 30 minutes. PEAK: 200 mg/m³, 4 times per shift, 30 minutes.
Acrylic acid	**Regulation on Limit Values - MAC (Austria, 4/2021).** CEIL: 59 mg/m³ CEIL: 20 ppm TWA: 29 mg/m³ 8 hours. TWA: 10 ppm 8 hours.
2-methyl-2H-isothiazol-3-one	**Regulation on Limit Values - MAC (Austria, 4/2021). [5-chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-methyl-2,3-dihydroisothiazol-3-one (mixture in the ratio 3:1)] Skin sensitiser.** TWA: 0.05 mg/m³ 8 hours.
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	**Regulation on Limit Values - MAC (Austria, 4/2021). [5-chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-methyl-2,3-dihydroisothiazol-3-one (mixture in the ratio 3:1)] Skin sensitiser.**

SECTION 8: Exposure controls/personal protection

	TWA: 0.05 mg/m³ 8 hours.
Triethylamine	**Limit values (Belgium, 5/2021). Absorbed through skin.** TWA: 0.5 ppm 8 hours. TWA: 2.07 mg/m³ 8 hours. STEL: 1 ppm 15 minutes. STEL: 4.14 mg/m³ 15 minutes.
2-Butoxyethanol	**Limit values (Belgium, 5/2021). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes.
Acrylic acid	**Limit values (Belgium, 5/2021). Absorbed through skin.** TWA: 2 ppm 8 hours. TWA: 6 mg/m³ 8 hours. STEL: 59 mg/m³ 1 minutes. STEL: 20 ppm 1 minutes.
Triethylamine	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). Absorbed through skin.** Limit value 15 min: 12.6 mg/m³ 15 minutes. Limit value 8 hours: 8.4 mg/m³ 8 hours. Limit value 15 min: 3 ppm 15 minutes. Limit value 8 hours: 2 ppm 8 hours.
2-Butoxyethanol	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). Absorbed through skin.** Limit value 8 hours: 98 mg/m³ 8 hours. Limit value 15 min: 246 mg/m³ 15 minutes. Limit value 15 min: 50 ppm 15 minutes. Limit value 8 hours: 20 ppm 8 hours.
propylidynetrimethanol	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021).** Limit value 8 hours: 50 mg/m³ 8 hours.
Acrylic acid	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021).** Limit value 8 hours: 29 mg/m³ 8 hours. Limit value 15 min: 20 ppm 1 minutes. Limit value 15 min: 59 mg/m³ 1 minutes. Limit value 8 hours: 10 ppm 8 hours.
Triethylamine	**Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). Absorbed through skin.** STELV: 12.6 mg/m³ 15 minutes. STELV: 3 ppm 15 minutes. ELV: 8.4 mg/m³ 8 hours. ELV: 2 ppm 8 hours.
2-Butoxyethanol	**Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). Absorbed through skin.** STELV: 246 mg/m³ 15 minutes. STELV: 50 ppm 15 minutes. ELV: 98 mg/m³ 8 hours. ELV: 20 ppm 8 hours.
Acrylic acid	**Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021).** ELV: 29 mg/m³ 8 hours. ELV: 10 ppm 8 hours. STELV: 59 mg/m³ 1 minutes. STELV: 20 ppm 1 minutes.

Triethylamine	**Department of labour inspection (Cyprus, 7/2021). Absorbed through skin.** STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes. TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours.
2-Butoxyethanol	**Department of labour inspection (Cyprus, 7/2021). Absorbed through skin.** STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes. TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours.
Acrylic acid	**Department of labour inspection (Cyprus, 7/2021).** STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes. TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours.
Triethylamine	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). Absorbed through skin.** TWA: 8 mg/m³ 8 hours. TWA: 1.904 ppm 8 hours. STEL: 12 mg/m³ 15 minutes. STEL: 2.856 ppm 15 minutes.
2-Butoxyethanol	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). Absorbed through skin.** TWA: 100 mg/m³ 8 hours. TWA: 20.4 ppm 8 hours. STEL: 200 mg/m³ 15 minutes. STEL: 40.8 ppm 15 minutes.
Acrylic acid	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022).** TWA: 29 mg/m³ 8 hours. STEL: 59 mg/m³ 1 minutes. TWA: 9.686 ppm 8 hours. STEL: 19.706 ppm 1 minutes.
Triethylamine	**Working Environment Authority (Denmark, 6/2022). Absorbed through skin.** TWA: 1 ppm 8 hours. TWA: 4.1 mg/m³ 8 hours. STEL: 12.6 mg/m³ 15 minutes. STEL: 3 ppm 15 minutes.
2-Butoxyethanol	**Working Environment Authority (Denmark, 6/2022). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
Acrylic acid	**Working Environment Authority (Denmark, 6/2022). Absorbed through skin.** STEL: 59 mg/m³ 1 minutes. STEL: 20 ppm 1 minutes. TWA: 2 ppm 8 hours. TWA: 5.9 mg/m³ 8 hours.
Triethylamine	**Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022). Absorbed through skin. Skin sensitiser.** TWA: 8.4 mg/m³ 8 hours. TWA: 2 ppm 8 hours. STEL: 12.6 mg/m³ 15 minutes. STEL: 3 ppm 15 minutes.
2-Butoxyethanol	**Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022). Absorbed through skin. Skin sensitiser.** TWA: 98 mg/m³ 8 hours. TWA: 20 ppm 8 hours.

	STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
Acrylic acid	**Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022).** TWA: 29 mg/m³ 8 hours. TWA: 10 ppm 8 hours. STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes.
Triethylamine	**EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values** TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours. STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes.
Acrylic acid	**EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values** STEL: 20 ppm 15 minutes. STEL: 59 mg/m³ 15 minutes. TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours.
Triethylamine	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). Absorbed through skin.** STEL: 1 ppm 15 minutes. STEL: 4.2 mg/m³ 15 minutes.
2-Butoxyethanol	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 250 mg/m³ 15 minutes.
Acrylic acid	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021).** TWA: 2 ppm 8 hours. TWA: 6 mg/m³ 8 hours. CEIL: 15 ppm CEIL: 45 mg/m³
Triethylamine	**Ministry of Labor (France, 10/2022). Absorbed through skin. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)** STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes. TWA: 4.2 mg/m³ 8 hours. TWA: 1 ppm 8 hours.
2-Butoxyethanol	**Ministry of Labor (France, 10/2022). Absorbed through skin. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)** TWA: 10 ppm 8 hours. TWA: 49 mg/m³ 8 hours. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
Acrylic acid	**Ministry of Labor (France, 10/2022). Notes: Indicative regulatory limit values (decree of 30-06-2004 modified)** TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours. STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes.

2,2-bis(acryloyloxymethyl)butyl acrylate	**DFG MAC-values list (Germany, 7/2022). Skin sensitiser.**
Triethylamine	**TRGS 900 OEL (Germany, 6/2022). Absorbed through skin.** TWA: 4.2 mg/m³ 8 hours. PEAK: 8.4 mg/m³ 15 minutes. TWA: 1 ppm 8 hours. PEAK: 2 ppm 15 minutes. **DFG MAC-values list (Germany, 7/2022).** TWA: 1 ml/m³ 8 hours. PEAK: 2 ppm, 4 times per shift, 15 minutes. TWA: 4.2 mg/m³ 8 hours. PEAK: 8.4 mg/m³, 4 times per shift, 15 minutes. PEAK: 2 ml/m³, 4 times per shift, 15 minutes.
2-Butoxyethanol	**TRGS 900 OEL (Germany, 6/2022). Absorbed through skin.** TWA: 49 mg/m³ 8 hours. PEAK: 98 mg/m³ 15 minutes. TWA: 10 ppm 8 hours. PEAK: 20 ppm 15 minutes. **DFG MAC-values list (Germany, 7/2022). Absorbed through skin.** TWA: 10 ppm 8 hours. PEAK: 20 ppm, 4 times per shift, 15 minutes. TWA: 49 mg/m³ 8 hours. PEAK: 98 mg/m³, 4 times per shift, 15 minutes.
Acrylic acid	**DFG MAC-values list (Germany, 7/2022).** TWA: 30 mg/m³ 8 hours. TWA: 10 ppm 8 hours. PEAK: 10 ppm, 4 times per shift, 15 minutes. PEAK: 30 mg/m³, 4 times per shift, 15 minutes. **TRGS 900 OEL (Germany, 6/2022).** TWA: 30 mg/m³ 8 hours. PEAK: 30 mg/m³ 15 minutes. TWA: 10 ppm 8 hours. PEAK: 10 ppm 15 minutes.
2-methyl-2H-isothiazol-3-one	**DFG MAC-values list (Germany, 7/2022). Skin sensitiser.**
Triethylamine	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). Absorbed through skin.** TWA: 10 ppm 8 hours. TWA: 40 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 60 mg/m³ 15 minutes.
2-Butoxyethanol	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). Absorbed through skin.** TWA: 25 ppm 8 hours. TWA: 120 mg/m³ 8 hours.
Acrylic acid	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021).** TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours. STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes.
Triethylamine	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). Absorbed through skin. Skin sensitiser. Inhalation sensitiser.** TWA: 8.4 mg/m³ 8 hours. PEAK: 12.6 mg/m³ 15 minutes. PEAK: 3 ppm 15 minutes. TWA: 2 ppm 8 hours.
2-Butoxyethanol	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). Absorbed through skin. Skin sensitiser. Inhalation sensitiser.** TWA: 98 mg/m³ 8 hours. PEAK: 246 mg/m³ 15 minutes. PEAK: 50 ppm 15 minutes. TWA: 20 ppm 8 hours.
Acrylic acid	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2022).** TWA: 29 mg/m³ 8 hours.

	PEAK: 59 mg/m³ 1 minutes. PEAK: 20 ppm 1 minutes. TWA: 10 ppm 8 hours.
Triethylamine	**Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Absorbed through skin.** STEL: 12.6 mg/m³ 15 minutes. STEL: 3 ppm 15 minutes. TWA: 8.4 mg/m³ 8 hours. TWA: 2 ppm 8 hours.
2-Butoxyethanol	**Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Absorbed through skin.** STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours.
Acrylic acid	**Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021).** TWA: 5.9 mg/m³ 8 hours. TWA: 2 ppm 8 hours.
Triethylamine	**NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 2 ppm 8 hours. OELV-8hr: 8.4 mg/m³ 8 hours. OELV-15min: 3 ppm 15 minutes. OELV-15min: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 20 ppm 8 hours. OELV-8hr: 98 mg/m³ 8 hours. OELV-15min: 50 ppm 15 minutes. OELV-15min: 246 mg/m³ 15 minutes.
Acrylic acid	**NAOSH (Ireland, 5/2021). Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 10 ppm 8 hours. OELV-8hr: 29 mg/m³ 8 hours. OELV-15min: 59 mg/m³ 1 minutes. OELV-15min: 20 ppm 1 minutes.
Triethylamine	**Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020). Absorbed through skin.** 8 hours: 2 ppm 8 hours. 8 hours: 8.4 mg/m³ 8 hours. Short Term: 3 ppm 15 minutes. Short Term: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020). Absorbed through skin.** 8 hours: 20 ppm 8 hours. 8 hours: 98 mg/m³ 8 hours. Short Term: 50 ppm 15 minutes. Short Term: 246 mg/m³ 15 minutes.
Acrylic acid	**Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020). Absorbed through skin.** Short Term: 20 ppm 1 minutes. Short Term: 59 mg/m³ 1 minutes. 8 hours: 10 ppm 8 hours. 8 hours: 29 mg/m³ 8 hours.

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Triethylamine	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021).** STEL: 3 ppm 15 minutes. TWA: 8.4 mg/m³ 8 hours. STEL: 12.6 mg/m³ 15 minutes. TWA: 2 ppm 8 hours.
2-Butoxyethanol	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021). Absorbed through skin.** TWA: 98 mg/m³ 8 hours. TWA: 20 ppm 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes.
Acrylic acid	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021).** TWA: 5 mg/m³ 8 hours. STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes. TWA: 1.7 ppm 8 hours.
Triethylamine	**Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). Absorbed through skin.** TWA: 8.4 mg/m³ 8 hours. TWA: 2 ppm 8 hours. STEL: 12.6 mg/m³ 15 minutes. STEL: 3 ppm 15 minutes.
2-Butoxyethanol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). Absorbed through skin.** TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours. STEL: 100 mg/m³ 15 minutes. STEL: 20 ppm 15 minutes.
propylidynetrimethanol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022).** CEIL: 5 ppm
Acrylic acid	**Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022).** TWA: 29 mg/m³ 8 hours. TWA: 10 ppm 8 hours. CEIL: 59 mg/m³ CEIL: 20 ppm
Triethylamine	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021). Absorbed through skin.** TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours. STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes.
Acrylic acid	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021).** STEL: 20 ppm 1 minutes. STEL: 59 mg/m³ 1 minutes. TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours.
Triethylamine	**EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values** TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours. STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours.

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	STEL: 50 ppm 15 minutes. STEL: 246 mg/m³ 15 minutes.
Acrylic acid	**EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values** STEL: 20 ppm 15 minutes. STEL: 59 mg/m³ 15 minutes. TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours.
Triethylamine	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). Absorbed through skin.** OEL, 8-h TWA: 4.2 mg/m³ 8 hours. STEL,15-min: 12.6 mg/m³ 15 minutes. STEL,15-min: 3 ppm 15 minutes. OEL, 8-h TWA: 1 ppm 8 hours.
2-Butoxyethanol	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). Absorbed through skin.** OEL, 8-h TWA: 100 mg/m³ 8 hours. STEL,15-min: 246 mg/m³ 15 minutes. OEL, 8-h TWA: 20.4 ppm 8 hours. STEL,15-min: 50 ppm 15 minutes.
Acrylic acid	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022).** STEL,15-min: 59 mg/m³ 1 minutes. OEL, 8-h TWA: 29 mg/m³ 8 hours. OEL, 8-h TWA: 10 ppm 8 hours. STEL,15-min: 20 ppm 1 minutes.
Triethylamine	**FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value** TWA: 2 ppm 8 hours. TWA: 8 mg/m³ 8 hours.
2-Butoxyethanol	**FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through skin. Notes: indicative limit value** TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.
Acrylic acid	**FOR-2011-12-06-1358 (Norway, 12/2022). Skin sensitiser. Notes: indicative limit value** TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours. **FOR-2011-12-06-1358 (Norway, 12/2022). Skin sensitiser.** STEL: 59 mg/m³ 15 minutes. STEL: 20 ppm 15 minutes.
Triethylamine	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). Absorbed through skin.** TWA: 3 mg/m³ 8 hours. STEL: 9 mg/m³ 15 minutes.
2-Butoxyethanol	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). Absorbed through skin.** TWA: 98 mg/m³ 8 hours. STEL: 200 mg/m³ 15 minutes.
Acrylic acid	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). Absorbed through skin.** TWA: 10 mg/m³ 8 hours. STEL: 29.5 mg/m³ 15 minutes.

Triethylamine	**Portuguese Institute of Quality (Portugal, 11/2014). Absorbed through skin.** TWA: 1 ppm 8 hours. STEL: 3 ppm 15 minutes.
2-Butoxyethanol	**Portuguese Institute of Quality (Portugal, 11/2014).** TWA: 20 ppm 8 hours.
Acrylic acid	**Portuguese Institute of Quality (Portugal, 11/2014). Absorbed through skin.** TWA: 2 ppm 8 hours.
Triethylamine	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). Absorbed through skin.** VLA: 8.4 mg/m³ 8 hours. VLA: 2 ppm 8 hours. Short term: 12.6 mg/m³ 15 minutes. Short term: 3 ppm 15 minutes.
2-Butoxyethanol	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). Absorbed through skin.** VLA: 98 mg/m³ 8 hours. VLA: 20 ppm 8 hours. Short term: 246 mg/m³ 15 minutes. Short term: 50 ppm 15 minutes.
Acrylic acid	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021).** VLA: 29 mg/m³ 8 hours. VLA: 10 ppm 8 hours. Short term: 59 mg/m³ 1 minutes. Short term: 20 ppm 1 minutes.
Triethylamine	**Government regulation SR c. 355/2006 (Slovakia, 9/2020). Absorbed through skin.** TWA: 8.4 mg/m³ 8 hours. TWA: 2 ppm 8 hours. STEL: 12.6 mg/m³ 15 minutes. STEL: 3 ppm 15 minutes.
2-Butoxyethanol	**Government regulation SR c. 355/2006 (Slovakia, 9/2020). Absorbed through skin.** TWA: 98 mg/m³ 8 hours. TWA: 20 ppm 8 hours. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
Acrylic acid	**Government regulation SR c. 355/2006 (Slovakia, 9/2020).** STEL: 59 mg/m³ 1 minutes. STEL: 20 ppm 1 minutes. TWA: 29 mg/m³ 8 hours. TWA: 10 ppm 8 hours.
Triethylamine	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). Absorbed through skin.** TWA: 8.4 mg/m³ 8 hours. TWA: 2 ppm 8 hours. KTV: 12.6 mg/m³, 4 times per shift, 15 minutes. KTV: 3 ppm, 4 times per shift, 15 minutes.
2-Butoxyethanol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). Absorbed through skin.** TWA: 98 mg/m³ 8 hours. TWA: 20 ppm 8 hours. KTV: 246 mg/m³, 4 times per shift, 15 minutes. KTV: 50 ppm, 4 times per shift, 15 minutes.
Acrylic acid	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). Absorbed through skin.** KTV: 20 ppm, 4 times per shift, 1 minutes. TWA: 10 ppm 8 hours.

	KTV: 59 mg/m³, 4 times per shift, 1 minutes. TWA: 29 mg/m³ 8 hours.
Triethylamine	**National institute of occupational safety and health (Spain, 4/2022). Absorbed through skin.** TWA: 2 ppm 8 hours. TWA: 8.4 mg/m³ 8 hours. STEL: 3 ppm 15 minutes. STEL: 12.6 mg/m³ 15 minutes.
2-Butoxyethanol	**National institute of occupational safety and health (Spain, 4/2022). Absorbed through skin.** TWA: 20 ppm 8 hours. TWA: 98 mg/m³ 8 hours. STEL: 245 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
Acrylic acid	**National institute of occupational safety and health (Spain, 4/2022). Absorbed through skin.** TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours. STEL: 59 mg/m³ 15 minutes. STEL: 20 ppm 15 minutes.
No exposure limit value known.	
Triethylamine	**SUVA (Switzerland, 1/2023).** TWA: 1 ppm 8 hours. TWA: 4.2 mg/m³ 8 hours. STEL: 2 ppm 15 minutes. STEL: 8.4 mg/m³ 15 minutes.
2-Butoxyethanol	**SUVA (Switzerland, 1/2023). Absorbed through skin.** TWA: 10 ppm 8 hours. TWA: 49 mg/m³ 8 hours. STEL: 20 ppm 15 minutes. STEL: 98 mg/m³ 15 minutes.
Acrylic acid	**SUVA (Switzerland, 1/2023). Skin sensitiser.** TWA: 10 ppm 8 hours. TWA: 29 mg/m³ 8 hours. STEL: 20 ppm 15 minutes. STEL: 59 mg/m³ 15 minutes.
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	**SUVA (Switzerland, 1/2023). Skin sensitiser.** STEL: 0.4 mg/m³ 15 minutes. Form: Inhalable fraction TWA: 0.2 mg/m³ 8 hours. Form: Inhalable fraction
Triethylamine	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 17 mg/m³ 15 minutes. TWA: 2 ppm 8 hours. TWA: 8 mg/m³ 8 hours. STEL: 4 ppm 15 minutes.
2-Butoxyethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours. STEL: 246 mg/m³ 15 minutes. TWA: 123 mg/m³ 8 hours.
Acrylic acid	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 59 mg/m³ 1 minutes. STEL: 20 ppm 1 minutes. TWA: 29 mg/m³ 8 hours. TWA: 10 ppm 8 hours.
2-(2-butoxyethoxy)ethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. TWA: 67.5 mg/m³ 8 hours.

Formaldehyde	STEL: 101.2 mg/m³ 15 minutes. **EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 2.5 mg/m³ 15 minutes. STEL: 2 ppm 15 minutes. TWA: 2 ppm 8 hours. TWA: 2.5 mg/m³ 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
2-Butoxyethanol	**Government regulation of Czech Republic Limit Values of Biological Exposure Tests (Czech Republic, 9/2015)** Biological limit values: 0.17 mmol/mmol creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: the end of the shift at the end of the week. Biological limit values: 200 mg/g creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: the end of the shift at the end of the week.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
2-Butoxyethanol	**DFG BEI-values list (Germany, 7/2022) Notes: danger from percutaneous absorption (see p. 211 and p. 228).** BEI: 150 mg/g creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift / for long-term exposures: at the end of the shift after several shifts. **TRGS 903 - BEI Values (Germany, 2/2022)** BEI: 150 mg/g creatinine, butoxy acetic acid (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift; for long-term exposures: at the end of shift after several shifts.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
2-Butoxyethanol	**NAOSH (Ireland, 1/2011)** BMGV: 200 mg/g creatinine, BAA [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
2-Butoxyethanol	**Portuguese Institute of Quality (Portugal, 11/2014)** BEI: 200 mg/g creatinine, butoxyacetic acid (BAA) [in urine]. Sampling time: end of shift.

No exposure indices known.	
No exposure indices known.	
2-Butoxyethanol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021)** BAT: 150 mg/g creatinine, butoxyacetic acid (after hydrolysis) [in urine]. Sampling time: at the end of the work shift, at long-term exposure: at the end of the work shift after several consecutive workdays.
2-Butoxyethanol	**National institute of occupational safety and health (Spain, 4/2022)** VLB: 200 mg/g creatinine, butoxyacetic acid [in urine]. Sampling time: end of shift.
No exposure indices known.	
2-Butoxyethanol	**SUVA (Switzerland, 1/2023)** BEI: 150 mg/g creatinine, 2-butoxy acetic acid (after hydrolisis) [in urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift.
2-Butoxyethanol	**EH40/2005 BMGVs (United Kingdom (UK), 8/2018)** BGV: 240 mmol/mol creatinine, butoxyacetic acid [in urine]. Sampling time: post shift.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.87 mg/m³	General population	Systemic
	DNEL	Long term Dermal	1.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	4.93 mg/m³	Workers	Systemic
Benzophenon	DNEL	Long term Oral	0.05 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.05 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.17 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	0.7 mg/m³	Workers	Systemic
2,2-bis(acryloyloxymethyl)butyl acrylate	DNEL	Long term Inhalation	17.1 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	404 mg/kg bw/day	Workers	Systemic
Triethylamine	DNEL	Long term Inhalation	8.4 mg/m³	Workers	Local
	DNEL	Long term Inhalation	8.4 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	12.1 mg/	Workers	Systemic

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			kg bw/day		
	DNEL	Short term Inhalation	12.6 mg/m³	Workers	Local
	DNEL	Short term Inhalation	12.6 mg/m³	Workers	Systemic
2-Butoxyethanol	DNEL	Long term Oral	6.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	26.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	59 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m³	General population	Local
	DNEL	Short term Inhalation	246 mg/m³	Workers	Local
	DNEL	Short term Inhalation	426 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	1091 mg/m³	Workers	Systemic
propylidynetrimethanol	DNEL	Long term Oral	0.34 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.34 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.58 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.94 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.3 mg/m³	Workers	Systemic
Acrylic acid	DNEL	Long term Oral	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	1.2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	3.6 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	3.6 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	30 mg/m³	Workers	Local
	DNEL	Long term Inhalation	30 mg/m³	Workers	Local
	DNEL	Short term Inhalation	30 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	30 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	1 mg/cm²	General population	Local
	DNEL	Short term Inhalation	3.6 mg/m³	General population	Local
	DNEL	Long term Inhalation	3.6 mg/m³	General population	Local
2-methyl-2H-isothiazol-3-one	DNEL	Long term Inhalation	0.021 mg/m³	General population	Local
	DNEL	Long term Inhalation	0.021 mg/m³	Workers	Local
	DNEL	Long term Oral	0.027 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.043 mg/m³	General population	Local
	DNEL	Short term Inhalation	0.043 mg/m³	Workers	Local
	DNEL	Short term Oral	0.053 mg/kg bw/day	General population	Systemic
reaction mass of: 5-chloro-2-methyl-	DNEL	Long term	0.02 mg/m³	General	Local

4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)		Inhalation		population	
	DNEL	Long term Inhalation	0.02 mg/m³	Workers	Local
	DNEL	Short term Inhalation	0.04 mg/m³	General population	Local
	DNEL	Short term Inhalation	0.04 mg/m³	Workers	Local
	DNEL	Long term Oral	0.09 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.11 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations : Wear suitable gloves tested to EN374.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

> 8 hours (breakthrough time): 4H / Silver Shield® gloves.

Wash hands before breaks and immediately after handling the product.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type (spray application): A P

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Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Greyish-white.

Odour : Slight

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range :

Ingredient name	°C	°F	Method
water	100	212	
ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	257.4	495.3	

Flammability : Not available.

Lower and upper explosion limit : Lower: Not applicable.
Upper: Not applicable.

Flash point : Closed cup: >100°C (>212°F)

Auto-ignition temperature :

Ingredient name	°C	°F	Method
2,2-bis(acryloyloxymethyl)butyl acrylate	385	725	EU A.15
ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	423	793.4	DIN EN 14522

Decomposition temperature : Not available.

pH : 7.6 to 8.6

Viscosity : Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
Benzophenon	0.003	0.0004				

Relative density : Not available.

Density : 1.2 g/cm³

Vapour density : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Benzophenon	LD50 Dermal	Rabbit	3535 mg/kg	-
	LD50 Oral	Rat	>10 g/kg	-
2,2-bis(acryloyloxymethyl) butyl acrylate	LD50 Dermal	Rabbit	5170 mg/kg	-
Triethylamine	LD50 Oral	Rat	460 mg/kg	-
propylidynetrimethanol	LD50 Oral	Rat	14000 mg/kg	-
Acrylic acid	LD50 Dermal	Rabbit	640 mg/kg	-
	LD50 Oral	Rat	33500 µg/kg	-
2-methyl-2H-isothiazol-3-one	LC50 Inhalation Dusts and mists	Rat	0.11 mg/l	4 hours
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	LD50 Oral	Rat	53 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Route	ATE value
Dermal	33826.74 mg/kg
Inhalation (vapours)	169.13 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
2,2-bis(acryloyloxymethyl) butyl acrylate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Triethylamine	Skin - Mild irritant	Rabbit	-	365 mg	-
2-Butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Acrylic acid	Eyes - Severe irritant	Rabbit	-	1 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 mg	-

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Skin - Severe irritant Skin - Severe irritant	Rabbit Human	- -	500 mg 0.01 %	- -

Conclusion/Summary : Based on available data, the classification criteria are not met.

Sensitisation

Conclusion/Summary : May cause an allergic skin reaction.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Conclusion/Summary : May cause cancer. Risk of cancer depends on duration and level of exposure.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Triethylamine	Category 3	-	Respiratory tract irritation
Acrylic acid	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Benzophenon	Category 2	-	-

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - *Ceriodaphnia dubia* - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - *Daphnia pulex* - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - *Fundulus heteroclitus*	96 hours
Benzophenon	Acute LC50 10.89 mg/l Fresh water	Fish - *Pimephales promelas* - LARVAE	96 hours
2-Butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - *Crangon crangon*	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - *Menidia beryllina*	96 hours
propylidynetrimethanol	Acute EC50 13000000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 14400000 µg/l Marine water	Fish - *Cyprinodon variegatus*	96 hours
Acrylic acid	Chronic NOEC 3.8 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	21 days
2-methyl-2H-isothiazol-3-one	Acute EC50 0.18 ppm Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 0.07 ppm Fresh water	Fish - *Oncorhynchus mykiss*	96 hours

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary : This product has not been tested for biodegradation.

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Benzophenon	3.18	12.02	Low
2,2-bis(acryloyloxymethyl) butyl acrylate	0.67	-	Low
Triethylamine	1.45	<0.5	Low
2-Butoxyethanol	0.81	-	Low
propylidynetrimethanol	-0.47	<1	Low
Acrylic acid	0.38	3.162	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC) : 080111*

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	-	-

SECTION 14: Transport information

14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADN : The product is only regulated as a dangerous good when transported in tank vessels.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not relevant/applicable due to nature of the product.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
TEKNOLUX AQUA 1728-53	≥90	3 28
Benzophenon	≤3	28

Labelling : Restricted to professional users.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

SECTION 15: Regulatory information

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Austria

VbF class : Not regulated.

Limitation of the use of organic solvents : Permitted.

Czech Republic

Storage code : IV

Denmark

Danish fire class : IV-1

Executive Order No. 1795/2015

Ingredient name	Annex I Section A	Annex I Section B
titanium dioxide	Listed	-
benzophenone	-	Carc. 1B, H350
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate	-	Carc. 2, H351

MAL-code : 00-1

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 00-1

Application: When spraying in existing* spray booths, if the operator is outside the spray zone.

- Arm protectors must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Full mask with combined filter, coveralls and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

SECTION 15: Regulatory information

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

List of undesirable substances : Not listed

Carcinogenic waste : Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.

Finland

France

Social Security Code, Articles L 461-1 to L 461-7 : Triethylamine — RG 49, RG 49bis
2-Butoxyethanol — RG 84

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany

Storage class (TRGS 510) : 6.1C

Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

Hazard class for water : 1

Technical instruction on air quality control : TA-Luft Number 5.2.5: 4.5%
TA-Luft Class I - Number 5.2.5: 2.3%

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

Italy

D.Lgs. 152/06 : Not determined.

Netherlands

Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development	Harmful via breastfeeding
benzofenon	Listed	-	-	-	-

Water Discharge Policy (ABM) : Z(1) Non biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/ reprotoxicity/ bioacumulative potential/ toxicity or persistence). Decontamination effort: Z

Norway

Sweden

Switzerland

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

SECTION 15: Regulatory information

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Sens. 1, H317	Calculation method
Carc. 1B, H350	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 1B	CARCINOGENICITY - Category 1B
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2

SECTION 16: Other information

Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of issue/ Date of revision : 09/10/2023

Date of previous issue : No previous validation

Version : 1

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.